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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,349	12/15/2003	Wilfrid LeBlanc	13744US01	4644

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EXAMINER

KUMAR, PANKAJ

ART UNIT	PAPER NUMBER
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2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/736,349

Applicant(s)

LEBLANC, WILFRID

Examiner

Pankaj Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it should not contain the title.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-21 are rejected under 35 U.S.C. 101.
4. In regards to claims 1-9, the claims disclose a process (method) that manipulates only number, abstract concepts or ideas or representing any of the foregoing, the claims are not being applied to an appropriate subject matter.
5. In regards to claims 10-21, the claims call for a seemingly patentable process but in reality seeking patent protection on an abstract idea as evidenced by claims 1-9.
6. See MPEP 2106 and Interim Guidelines.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1-21 are also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either an asserted utility or a well established utility for the

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reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiraki USPN 5,884,194 in view of Nakagawa USPN 5774561.

11. As per claim 17, Shiraki teaches a first input for receiving a first signal comprising energy in a first frequency band (Shiraki fig. 7: one input into 5); a second input for receiving a second signal comprising energy in a second frequency band (Shiraki fig. 7: another input into 5); an echo canceller that receives the first signal and the second signal, the echo canceller producing a third signal (Shiraki fig. 7: echo canceller 5 receives 2 signals and outputs D(k)); and a non-linear processor that attenuates the third signal based upon a level of energy in the second frequency band of the second input. Shiraki does not teach that the inputs into echo canceller 5 are in a first frequency band and a second frequency band. Nakagawa 5774561 teaches that inputs into echo canceller are in a first frequency band and a second frequency band (Nakagawa fig. 2; paragraph 8: "FIG. 2 illustrates a conventional subband acoustic echo canceller disclosed in the aforementioned U.S. Pat., which divides the frequency band of the received signal $x(n)$ into N subbands and cancels an echo in each subband."). Thus, it would

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have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Nakagawa into Shiraki since Shiraki suggests inputs into an echo canceller (something broad) in general and Nakagawa suggests the beneficial use of the inputs into an echo canceller being a different frequencies such as to remove echoes from multiple frequencies in the analogous art of communications with echo canceller.

12. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiraki USPN 5,884,194 in view of Nakagawa USPN 5774561 as applied to claim 17 above and further in view of Park USPN 6,181,794.

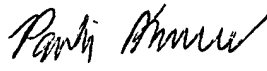
13. As per claim 21, Shiraki in view of Nakagawa teaches the device of claim 17. Shiraki in view of Nakagawa does not teach wherein the communication system comprises a packet network. Park 6181794 teaches wherein the communication system comprises a packet network (Park col. 9 line 25). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Park into Shiraki in view of Nakagawa since Shiraki in view of Nakagawa suggests echo canceling and nonlinear processing (something broad) in general and Park suggests the beneficial use of packet in a echo canceling and nonlinear processing system such as to have voice communication (Park col. 7 line 48) in the analogous art of communication.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (571) 272-3011. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Pankaj Kumar
Primary Examiner
Art Unit 2611

PK